(16)

Archer Daniels Midland Company
4666 Faries Parkway
Decatur, IL 62525
T 217.424.5200

September 19, 2014

Mr. Steve Jann
Acting Branch Chief
Region 5, WU-16J
U.S. Environmental Protection Agency
77 W. Jackson Blvd.
Chicago, IL 60604

Subject: Endangered Species Assessment for ADM UIC Class VI Permit Application
No Effect Determination on Indiana Bat and Eastern Prairie Fringed Orchid.

Dear Mr. Jann,

We are requesting concurrence from the U.S. Environmental Protection Agency that the UIC Class VI permit for the Illinois Basin Decatur Project's (IBDP) injection well CCS#1 would have no effect on the federally endangered Indiana bat (Myotis sodalis) and the federally threatened eastern prairie fringed orchid (Platanthera leucophaea). The IBDP project is located in Decatur (39° 52' 37.06469" N, 88° 53' 36.25685" W), Macon County, Illinois. Under the Illinois Environmental Protection Agency's permit (Permit No.: UIC-012-ADM) ADM drilled a 7,200 ft CO_2 injection well, 7,200 ft deep monitoring well, and a 3,500 ft geophysical monitoring well. All construction activities occurred within a previously developed area that is zoned for heavy industrial (M-2) use by the City of Decatur. Figure 1 shows the locations of the injection and monitoring wells. Figures 2 & 3 show the injection and observation wells drilled under the IEPA Class 1 permit.

The CO_2 injection and monitoring wells are located on the northern side of the ADM Decatur Facility. Well construction activities had minimal impact to the surrounding environment because the area was previously developed for industrial use and all construction activities were carried out on compacted rock surfaces.

Based on an assessment by Dr. David Larrick (Ph.D. Forestry and Forest Resources, Penn State University) the following determination is made about the project's impact to federally protected species.

The Indiana bat requires forested areas for summer habitat, roosting under loose bark of dead or dying trees. Foraging of flying insects occurs in wooded areas, along rivers and lakes, and in uplands. The nearest wooded area that may serve as suitable roosting and foraging habitat is located approximately one mile east of the IBDP project wells. Live trees are found within a few

hundred yards of the project site. However, inspection of these trees indicated tight barked species unsuitable for roosting. Winter habitat of the Indiana bat includes caves and abandoned mines for hibernation. The nearest known coal mine is approximately three miles southwest of the project site (see Figure 4). Additionally, there are no known occurrences of the Indiana bat in Macon County, Illinois (U.S. Fish and Wildlife Service 2013). From these data, we conclude the IBDP project would have no effect on the summer and winter habitat and behavior of the Indiana bat.

The eastern prairie fringed orchid is known to occur in Macon County. In Illinois, this rare orchid only exists in undisturbed, high quality habitats such as moist to mesic black soil prairies, sand prairies, thickets, pot hole marshes, and fens (Hilty 2013). Decline of this orchid is primarily due to habitat loss, including the conversion of natural habitat to cropland and pasture, drainage and development of wetlands, and competition from vegetation than dominates a site. The IBDP project is located on a site that was previously disturbed from its natural state. The area proximate to the injection and monitoring wells, consists of compacted rock surfaces bounded by cool-season grasses. The eastern prairie fringed orchid has not been observed growing in this area. We conclude the IBDP project would have no effect on the occurrence of this orchid.

Based on the above species habitat requirements, proposed project site conditions, and known occurrence of the Indiana bat and eastern prairie fringed orchid, on behalf of the IBDP project, we request your concurrence with our determination.

Sincerely,

Scott McDonald
Director Biofuels Development
Archer Daniels Midland Company
217-451-5142
scott.mcdonald@adm.com

REFERENCES

U.S. Fish and Wildlife Service (2013, October). Illinois County Distribution of Federally Threatened, Endangered and Candidate Species. Retrieved from http://www.fws.gov/midwest/Endangered/lists/illinois-spp.html

Hilty, J. (2013, August). Prairie Wildflowers of Illinois. Retrieved from http://www.illinoiswildflowers.info/prairie/plantx/pwf_orchidx.htm

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Mark Atkinson

Enclosure:
Endangered Species Assessment Report, Dr. David Larrick

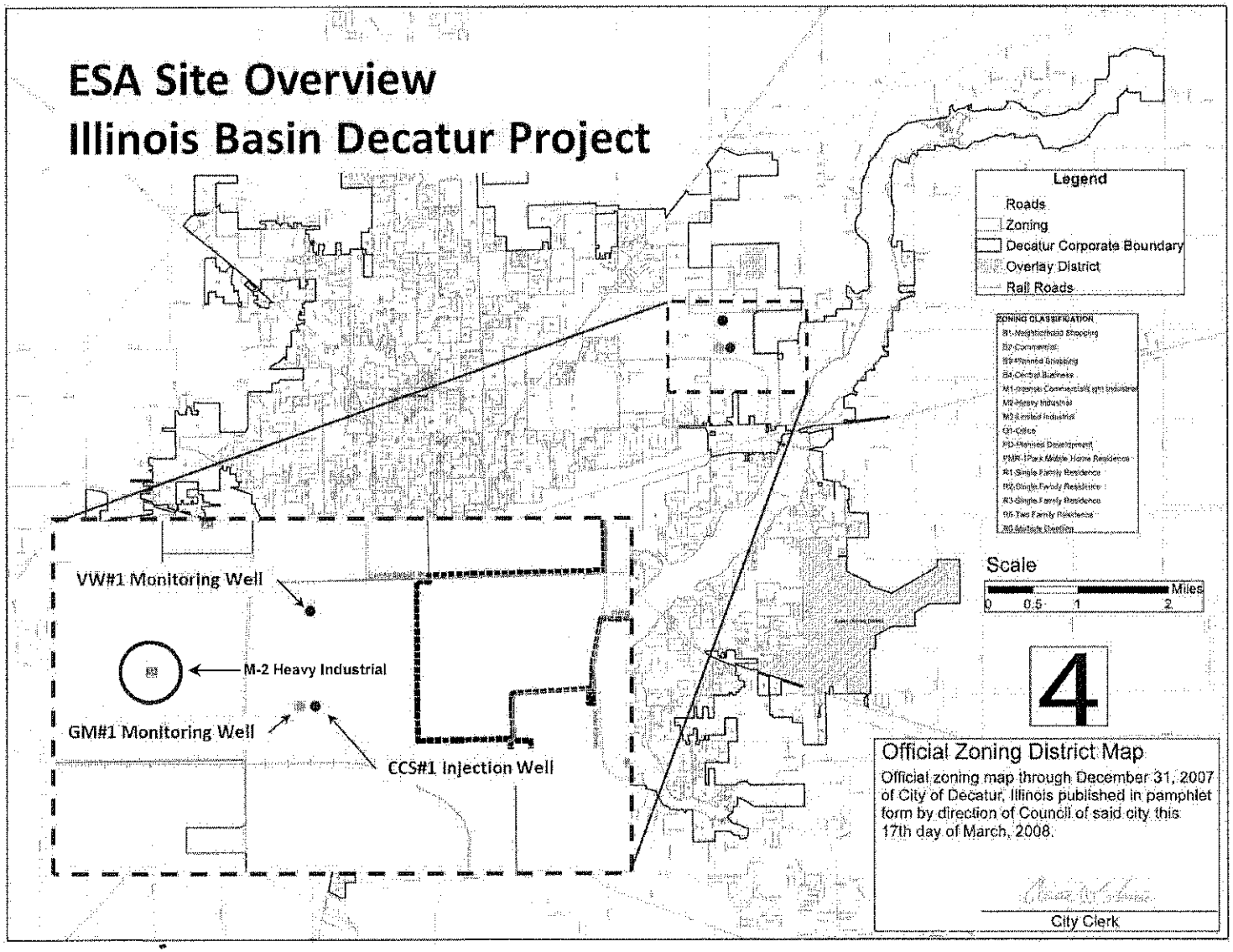
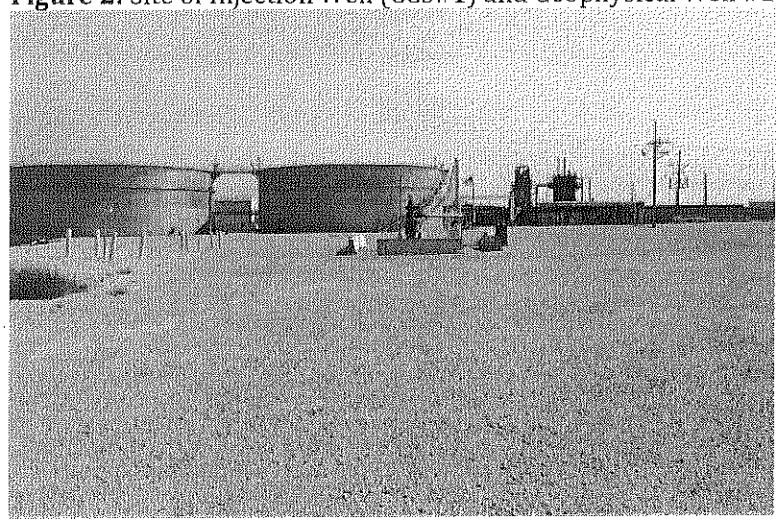
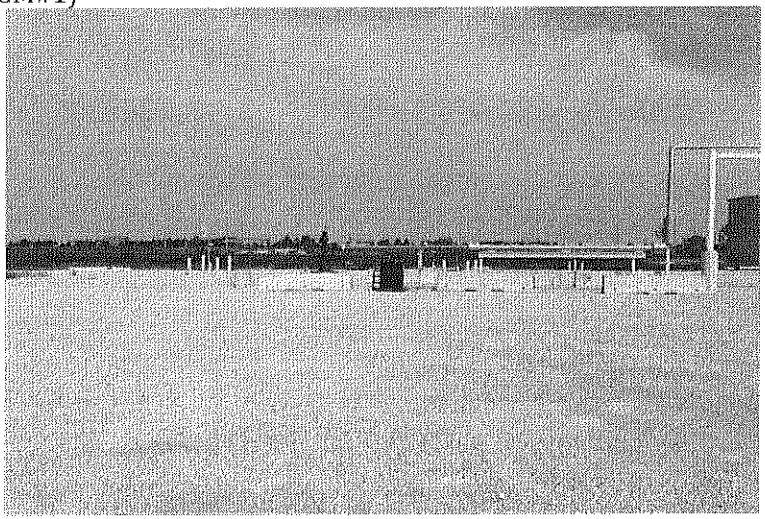

ESA Site Overview
Illinois Basin Decatur Project
Legend
Roads
Zoning
Decatur Corporate Boundary
Overlay District
Rail Roads
VW#1 Monitoring Well
M-2 Heavy Industrial
GM#1 Monitoring Well
CCS#1 Injection Well
Scale
Miles
0 0.5 1 2
4
Official Zoning District Map
Official zoning map through December 31, 2007 of City of Decatur, Illinois published in pamphlet form by direction of Council of said city this 17th day of March, 2008.
City Clerk

Figure 2: Site of Injection Well (CCS#1) and Geophysical Well #1 (GM#1)

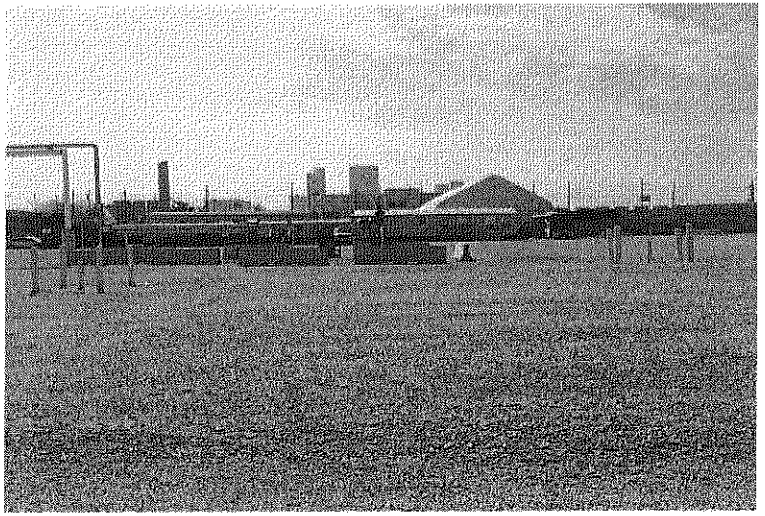


Eastern View



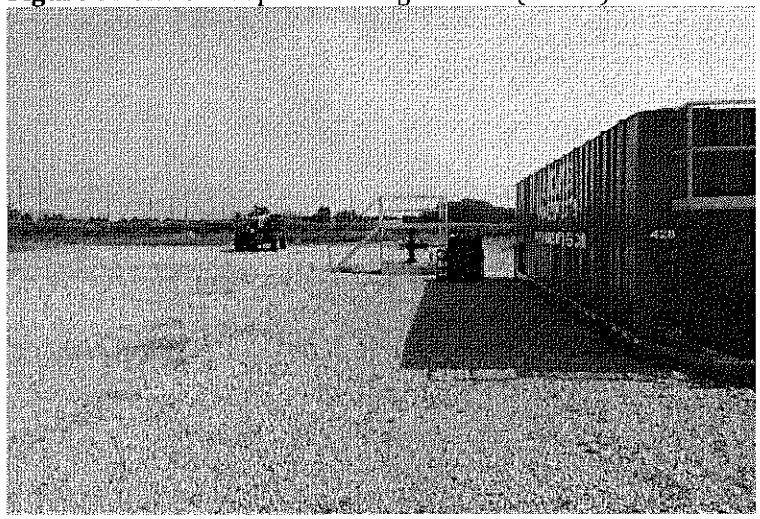
Northern View

Western View

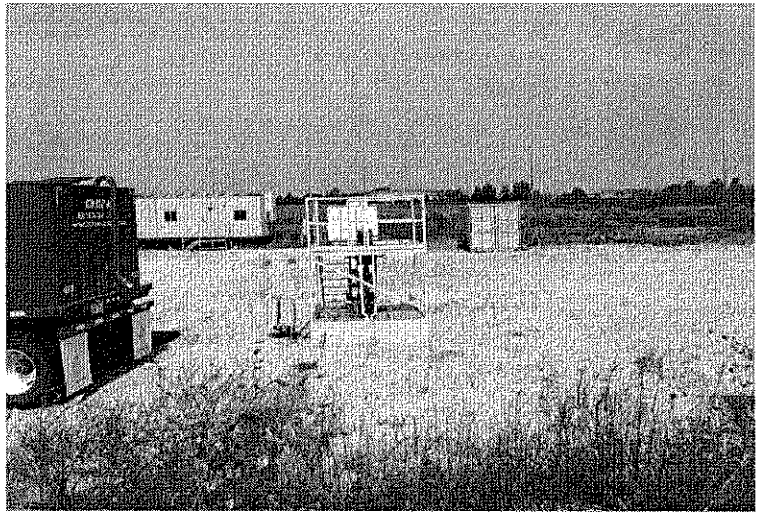


Southern View

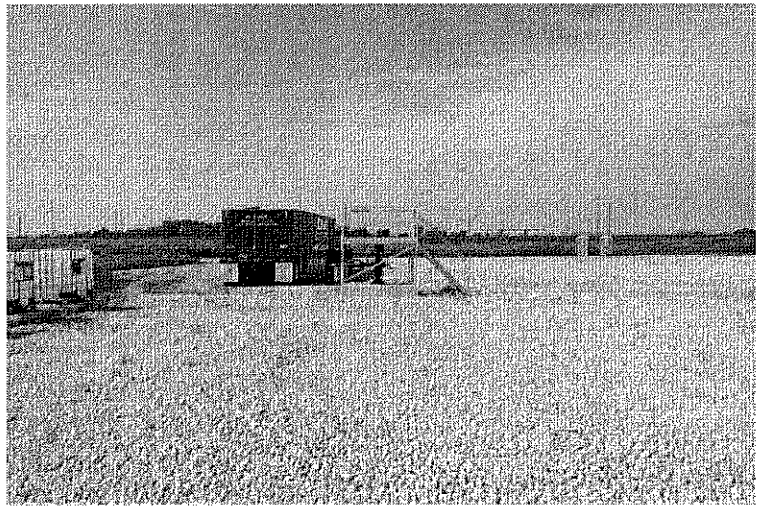
Figure 3: Site of Deep Monitoring Well #1 (VW#1)



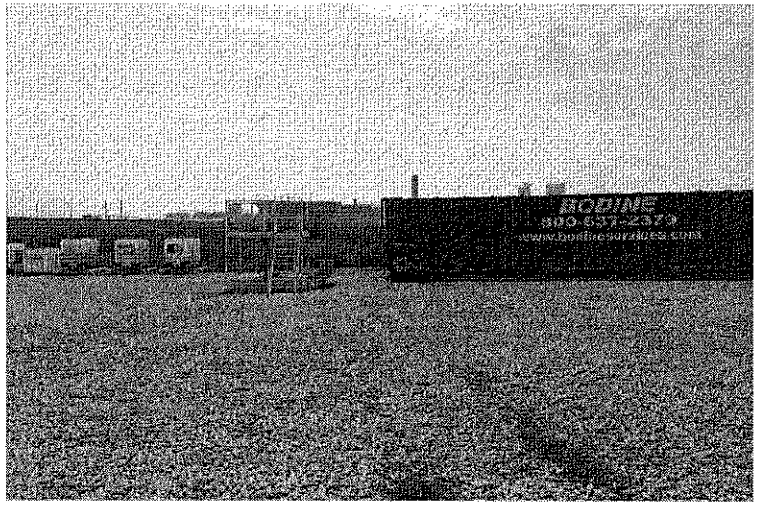
Eastern View



Northern View

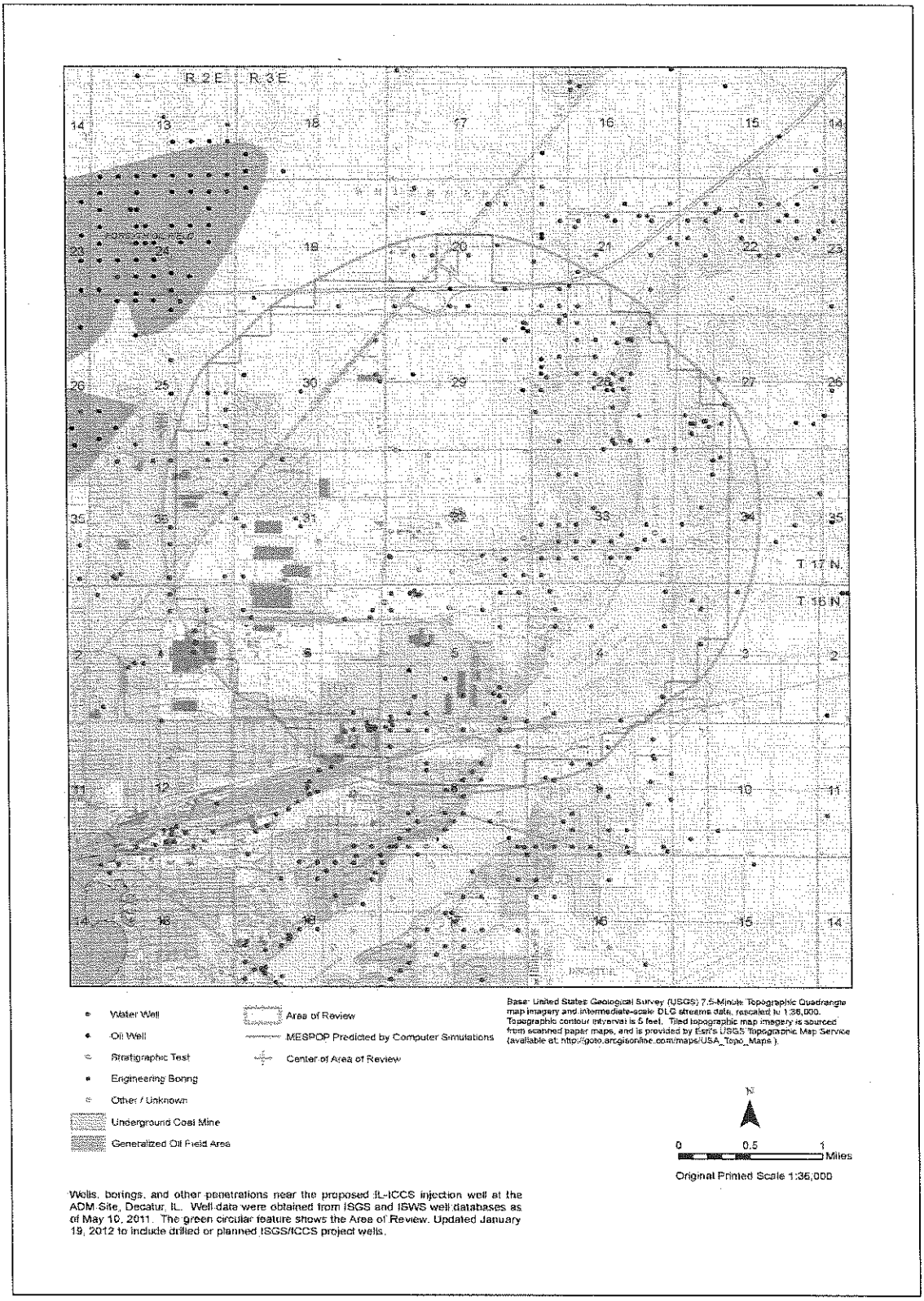


Western View



Southern View

Figure 4: Map showing existing well bores and underground coal mines.



Wells, borings, and other penetrations near the proposed IL-ICCS injection well at the ADM Site, Decatur, IL. Well data were obtained from ISGS and ISWS well databases as of May 10, 2011. The green circular feature shows the Area of Review. Updated January 19, 2012 to include drilled or planned ISGS/ICCS project wells.

Richland Community College

September 19, 2014

Mr. Scott McDonald
Biofuels Development Director
Project Director, IL-ICCS Project
Archer Daniels Midland Company
1001 N. Brush College Rd.
Decatur, IL 62521

Dear Mr. McDonald:

I have conducted an assessment of the potential impact of Illinois Basin Decatur Project (IBDP) CO_2 injection and monitoring wells on the federally endangered Indiana bat (*Myotis sodalis*) and the federally threatened eastern prairie fringed orchid (*Platanthera leucophaea*). The IBDP project is located in Decatur, Illinois and consists of two CO_2 monitoring wells and a CO_2 injection well (Figure 1). All well site locations have been previously disturbed from their natural state. The deep monitoring well (VW#1) is located on the north side of the ADM facility south of Richland Community College. The geophysical monitoring well (GM#1) and the injection well (CCS#1) are more centrally located within the ADM facility east of the plant's waste water treatment facility. Both locations consist of compacted rock surfaces bounded by indigenous prairie grasses.

CCS#1 (7,200 ft. depth) and GM#1 (3,500 ft. depth) are sited on a common 500 x 500 ft. compacted rock surface bounded by indigenous prairie grasses. VW#1 (7,200 ft. depth) is sited north of the injection well on a 300 x 300 ft. compacted rock surface bounded by indigenous prairie grasses.

The Indiana bat requires forested areas for summer habitat, roosting under loose bark of dead or dying trees. Foraging of flying insects occurs in wooded areas, along rivers and lakes, and in uplands. The nearest wooded area that may serve as suitable roosting and foraging habitat is located approximately one mile east of the IL-ICCS project wells. Live trees are found within a few hundred yards of the project site. The IBDP project will not remove any existing live trees. However, inspection of these trees indicated tight barked species unsuitable for roosting. Winter habitat of the Indiana bat includes caves and abandoned mines for hibernation. The nearest known coal mine is approximately three miles southwest of the project site (Figure 2). Additionally, there are no known occurrences of the Indiana bat in Macon County, Illinois (U.S. Fish and Wildlife Service 2013). From these data, the IBDP project would have *no effect* on the summer and winter habitat and behavior of the Indiana bat.

The eastern prairie fringed orchid is known to occur in Macon County. In Illinois, this rare orchid only exists in undisturbed, high quality habitats such as moist to mesic black soil prairies, sand prairies, thickets, pot hole marshes, and fens (Hilty 2013). Decline of this orchid is primarily due to habitat loss, including the conversion of natural habitat to cropland and pasture, drainage and development of wetlands, and competition from vegetation than dominates a site. The IBDP project is located on a site that was previously disturbed from its natural state. The area proximate to the injection and monitoring wells, consists of compacted rock surfaces bounded by indigenous cool-season grasses. The eastern

prairie fringed orchid was not observed in a survey of the well sites. The IBDP project would have *no effect* on the occurrence of this orchid.

Based on the above species habitat requirements, proposed project site conditions, and known occurrence of the Indiana bat and eastern prairie fringed orchid, the IBDP project would have *no effect* on these federally endangered and threatened species.

Sincerely

David Larrick

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REFERENCES
U.S. Fish and Wildlife Service (2013, October). Illinois County Distribution of Federally Threatened, Endangered and Candidate Species. Retrieved from http://www.fws.gov/midwest/Endangered/lists/illinois-spp.html

Hilty, J. (2013, August). Prairie Wildflowers of Illinois. Retrieved from http://www.illinoiswildflowers.info/prairie/plantx/pwf_orchidx.htm

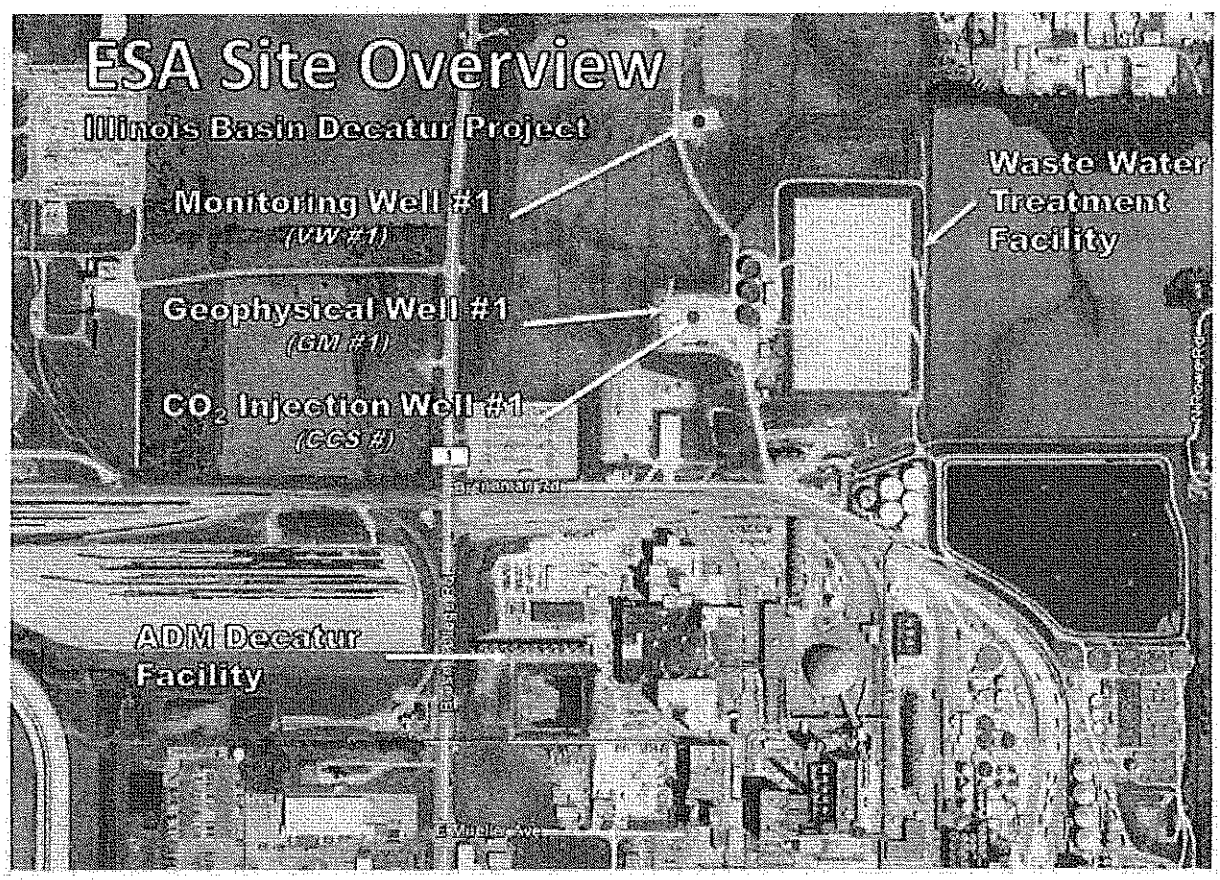

Figure 1. Illinois Basin Decatur Project – Site Overview

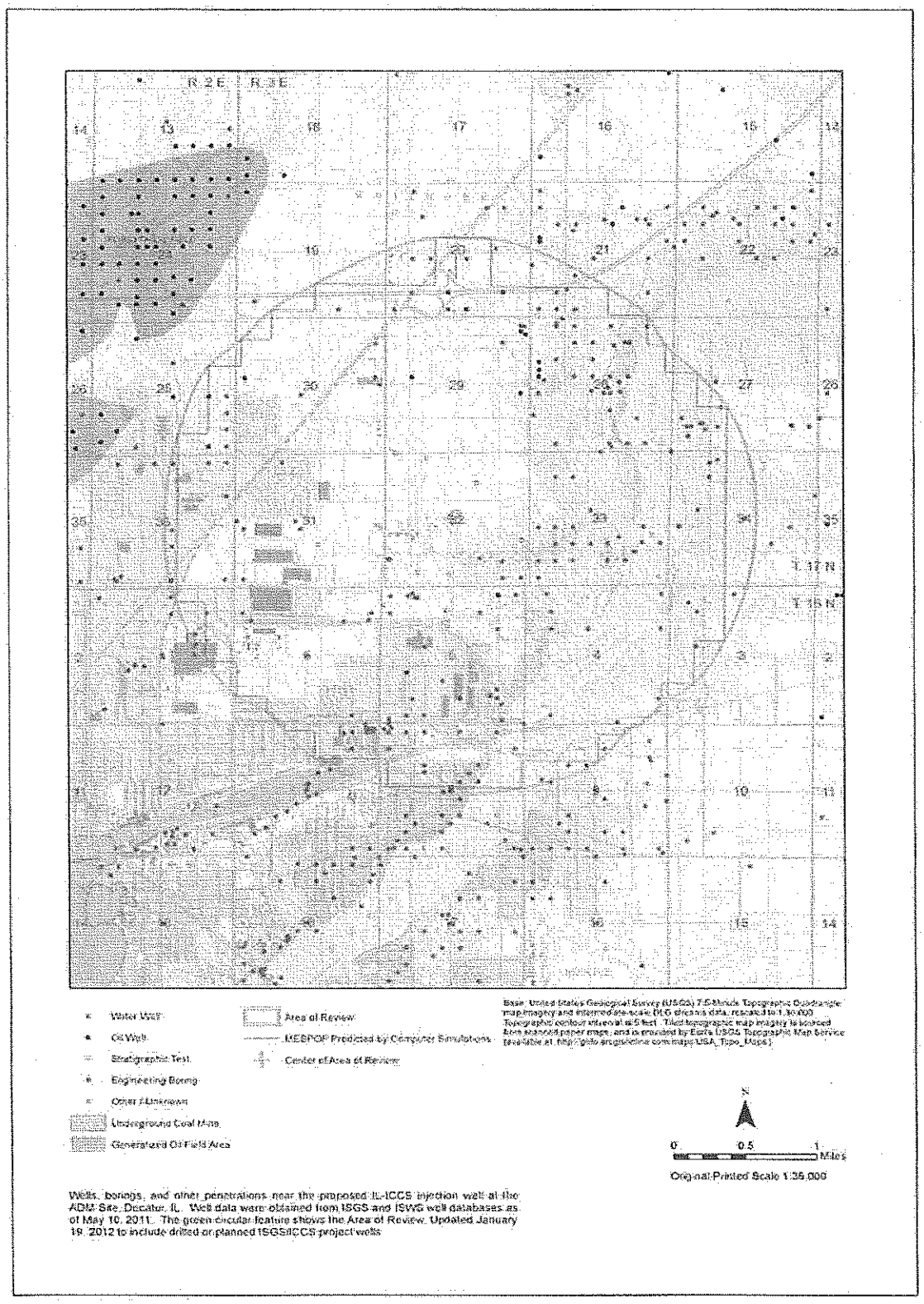

Figure 2. Location of IBDP Project and Underground Coal Mines